

TASK FORCE ON CADMIUM IN CHILDREN'S JEWELRY

Meeting Minutes

Thursday August 7, 2014

2:00 PM in Room 2D of the LOB

I. CONVENE MEETING

- a. The meeting was convened at 2:08 PM.

II. REMARKS BY THE CHAIRS

- a. Rep. Baram laid the background and parameters of the meeting, the resources available to the task force members and inviting other individuals as guest speakers.

III. ROUNDTABLE DISCUSSION

- a. Rep. Baram provided remarks on the key issues he felt the group should have on their minds for the remainder of the year. Rep. Baram noted the following areas: The difference of the 75 parts-per-million (PPM) versus 300 PPM, the difference in jewelry that does or does not have specific protective coating, soluble vs. non-soluble regulations, discussion of a notice requirement or available educational materials, and finding common ground despite the best and worst case scenarios of accidental ingestion.
- b. Rep. Urban said her concerns include the period testing timelines for exposure to stomach acid, wear and tear exposure testing, paying for migration tests, and a parts-per-million (PPM) standard before it fails. Dr. Gary Ginsberg indicated that funding would be a primary concern for wet chemists to assist in DPH testing of these products. Rep. Urban noted the necessity to get this policy right rather than fast.
- c. Rep. Baram asked Rep. Urban a question regarding migration tests. Rep. Urban deferred to Dr. Ginsberg. Dr. Ginsberg responded to Rep. Baram's inquiry with details regarding the ASTM standards for initial testing based on content, then migration to understand what may be bioavailable. Rep. Baram asked what would occur if a product failed the first test. Dr. Ginsberg responded that current law which is not in effect yet would follow ASTM standards indicate and require the additional tests.
- d. Sen. Kevin Witkos stated the task force should explore the interaction the product would have with food items in the digestive system, what occurs as the product moves from the stomach through the intestines, and the 24-hour acidic testing. Sen. Witkos then asked Dr. Ginsberg a question regarding the time it takes to run a test on a jewelry piece made with cadmium. Dr. Ginsberg responded to that tests run three tests from \$50-\$200 per sample to make a decision regarding product safety. Sen. Witkos indicated the task force should also explore is why the toy and jewelry industries are not testing jewelry that's been distressed.
- e. Rep. Dan Carter discussed whether there are other studies regarding distressed jewelry, noting Dr. Weidenhamer's report being the only one he has seen, but the importance of the point Dr. Weidenhamer provides. Rep. Urban provided a brief response to Rep. Carter regarding TSCA (Toxic Substances Control Act) and it's relation to government verifications of industry testing for certain products. Rep. Urban indicated that it has not been updated for some time due to the debate surrounding verification of the testing.
- f. Tim Phalen requested a manufacturer be brought in to discuss their process, standards, and testing jewelry. His top concern is the potential impact on retailers and manufacturers if the standards change. Rep. Baram noted the necessity of such a guest to present and ask questions of at a future meeting. Tim Phalen stated he would take responsibility for recommending speakers that cover his topics for discussion.
- g. Rep. Baram asked for clarification of component testing. Anthony DèGeorge clarified by providing an example of a product that would be broken down by specific parts and different paint coatings. Rep. Baram followed up with questions regarding the sample size for testing a mass produced product. Mr. DèGeorge responded that not every product can be tested by wet chemistry, but that XRF testing can be done on a wider scale for each raw product prior to assembly. Anthony DèGeorge added that after a mass produced item is finalized, roughly 24 pieces are taken and sent to labs for testing multiple times. Rep. Baram asked if any of those sample pieces failed at the lab, what happens to the remaining bulk of produced items. Anthony DèGeorge responded a hold is put on the delivery of those goods depending on what component failed. The specific component would be removed from all of the mass produced items, re-produced by the manufacturer, reassemble to the remaining body of the product, and then resent out to labs for resting.
- h. Rep. Urban asked Anthony DèGeorge regarding the use of cadmium versus zinc and whether zinc has not been more widely used because of cost. Mr. DèGeorge responded that the industry did not switch to cadmium. Rep. Urban asked for clarification if cadmium has always been a part of the process and did not increase after standards were placed on lead. Anthony DèGeorge responded that he did not believe the industry increased the use of cadmium after lead regulations were put in place. Anthony DèGeorge indicated that there were high levels of cadmium observed in the market alongside lead because there were no

regulations for it even after regulations were put in place for lead. Rep. Urban asked what was used as a replacement by the entire industry after lead was regulated. Anthony DeGeorge responded that for his company specifically, zinc was their substitute for lead and so did several other groups, but he could not speak for the entire industry. Sen. Witkos asked Anthony DeGeorge about public relations or notices to state agencies responsible for changes in standards. Anthony DeGeorge responded to Sen. Witkos's inquiry noted they tried to be ahead of the curve when their industry started to make changes, but did not make any public relations moves regarding their company's changes. Sen. Witkos followed up asking if there was any warning produced by Anthony DeGeorge or the company he works for to the public when they made their voluntary changes. Anthony DeGeorge stated that the company felt they could simply shift away from using cadmium in their products specifically, but did not do a testing throughout the market to see what was out there and did not see the cadmium levels as a big issue.

- i. Dr. Ginsberg asked Anthony DeGeorge whether their third party testing was done overseas. Anthony DeGeorge responded that it is done overseas by a credited lab in China. Dr. Ginsberg asked that if their company does an XRF test, what number they are looking for in pre-screening before it fails. Anthony DeGeorge responded that they are pre-screening for 75 parts-per-million (PPM). Anthony DeGeorge added that he prefers utilizing at the raw component level rather than the final product because it has limitations screening a total product. Dr. Ginsberg asked Anthony DeGeorge if testing the whole product underestimates the cadmium content. Anthony DeGeorge responded that it could go either way in regards to false readings for cadmium levels. Dr. Ginsberg noted that CPSC had a good correlation between XRF and wet chemistry testing and noted XRF testing is done frequently for items at U.S. ports. Anthony DeGeorge stated his company strongly prefers using wet chemistry testing when needed for a total product in order to get more defined numbers.
- j. Rep. Baram inquired of the ratio of jewelry made in China or other countries versus what is made in Connecticut or the U.S. Brent Cleaveland responded that a survey his organization did and industry survey had found 95% of items were produced in China. Rep. Baram asked Anthony DeGeorge for clarification regarding third party testing done in China and if it is also done in the U.S. upon arrival. Anthony DeGeorge responded that they used to work that way, but now do their independent testing with a third-party lab in China. Rep. Baram asked if Anthony DeGeorge's company is picking the lab or if the manufacturer is. Anthony DeGeorge responded that first the manufacturer uses a separate lab or an in-house lab, their company then sends the product to a third-party lab, and then send it to the customer's third-party lab. Tim Phalen added for clarification that while Anthony DeGeorge's company does not test after that point, it is tested at the ports, referencing Dr. Ginsberg's comments. Dr. Ginsberg agreed, noting it was a small sample size. Tim Phalen asked Anthony DeGeorge if the standards those labs test are the same standards the company uses. Anthony DeGeorge responded that they are meeting federal levels for certain components. Rep. Urban asked for clarification on what the third party labs use as a level for cadmium, as there is no federal level for it. Anthony DeGeorge responded they test for 75 PPM and added that anything above that is destroyed. Rep. Baram asked Mr. DeGeorge about whether the tests done are soluble versus non-soluble, and whether these tests would meet the current state standards to be put in state statute in 2016. Anthony DeGeorge responded that is the same 75 PPM but they also have to respond to customer requests, which could be beyond 75 PPM. Anthony DeGeorge indicated that is why it is ideal to have a national standard. Rep. Baram asked Anthony DeGeorge if there are other levels his company is implementing for other components, such as glass or colored jewelry that are higher. Anthony DeGeorge responded that they meet the customer requirements for coatings and sub-straight. Rep. Baram asked if Anthony DeGeorge could provide the task force these different standards his company uses to understand what he is doing without regulation. Anthony DeGeorge agreed to the request.
- k. Brent Cleaveland recommended the following questions for discussion: 1. Is the 300 PPM level safe, or is 75 PPM required? 2. Is migration the appropriate test to measure risk? 3. Do we need a standard at all? Brent Cleaveland stated migration testing is the only effective way to gauge risk, but risk varies depends on the materials in the product. Rep. Baram asked Brent Cleaveland about a handout that was passed out before the meeting and expressed that the chairs should be given the information to review prior to meetings. Brent Cleaveland acknowledged the document was his and stated he would follow proper protocol in the future.
- l. Dr. Ginsberg asked Brent Cleaveland to clarify his thoughts on Dr. Weidenhamer's study. Brent Cleaveland responded to Dr. Ginsberg's remarks by indicating the issue of paint and rhinestones on the products he tested would skew the results. Dr. Ginsberg responded with the intent of his study regarding the large emission of cadmium from minimal marring of the total product. Brent Cleaveland mentioned a study undertaken at Cornell University where pieces with and without coating were tested to find the correlation.

IV. ADJOURNMENT

- a. The meeting was adjourned at 3:51 P.M.